Low-Profile Microwave Detector (313)

The 313 Low-Profile Microwave Detector provides occupancy detection for the automatic control of DALI lighting loads. The unit can also be controlled using the Helvar 303 Infrared Remote control handset.

The 313 detects movement using its highly sensitive microwave detector. It emits low-power microwave signals, and measures the reflections as the signals bounce off moving objects.

When an area is no longer occupied, the load will switch off after a certain time. This time-out period is configured using Helvar’s lighting system design and control software: Designer, or Toolbox.

From hardware revision 4, the Low-Profile Microwave Detector can be used with a Helvar 401, 402 or 403 or a generic 12 V to 24 V power supply unit.

Key Features

- The microwave sensor detects movement within the detection range allowing load control in response to changes in room occupancy.
- The IR receiver receives control and programming commands from a 303 IR (infrared) handset (available separately).
- The Status LEDs flash red to indicate the following:

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<th>Valid setting received</th>
<th>Identify active</th>
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1. = Red LED

Detection Pattern

Installation: Mounting hole

1. External power cable (optional)
2. Attach cable clamp
3. Installation: Surface back box SBB-A

Note: Order the SBB-A surface mount box separately.

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<th>73</th>
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Sensitivity set to maximum
Technical Data

Connections

External power / DALI: Removable terminal block
Wire size: 0.5 mm² – 2.5 mm²
Solid or stranded

Cable rating: All cables must be mains rated.

Power

DALI supply input: 13 V to 22.5 V
DALI consumption: 20 mA
Note: DALI consumption is less than 2 mA when external power is supplied to the unit.

(Optional) External Power: 12 V to 24 V; 0.3 W

Remote control functions

Use Helvar 303 remote control to:
– Recall lighting scenes 1–4
– Adjust light levels
– Store current level
– Install preset levels for scenes 1–4
Note: Adjust sensitivity using Designer, or Toolbox [not by remote control unit].
Factory setting for sensor sensitivity: 9 (maximum).

Microwave operating frequency

Frequency: 5.8 GHz

Mechanical data

Mounting hole diameter: 68 mm
Bezel diameter: 76 mm
Recommended clearance depth: 80 mm [without protective cover]
100 mm [with protective cover]
[incl. 50 mm for cabling]
Material (casing): Flame retardant ABS and PC/ABS
Finish/Colour: Matt / White RAL 9003
Weight: 90 g
IP code: IP30

Operating conditions

Ambient temperature: 0 °C to +35 °C
Relative humidity: Max. 90 %, noncondensing
Storage temperature: −10 °C to +70 °C

Conformity and standards

EMC emission: EN 61000–6–1
EMC immunity: EN 61000–6–3
Safety: EN 60730–1
Environment: Complies with WEEE and RoHS directives.

Version information

Software version: 6
Hardware version: Rev. 4